MITSUBISHI ELECTRIC CE

Building Air-Conditioning Control System

Lossnay Remote Controller   PZ-52SF-E

Installation Manual

This manual contains only the installation procedure for the Lossnay remote controller. For information about how to wire and install the Lossnay units and the Lossnay adaptor, see their installation manuals.
In the remainder of this manual, the term "Lossnay unit" implies the Lossnay with which the Lossnay adaptor is connected unless it is specified.
For your safety, thoroughly read [1 Safety Precautions] described below before installing the Lossnay remote controller correctly.

1 Safety Precautions

● The following two symbols are used to denote dangers that may be caused by incorrect use:

⚠ WARNING	This symbol denotes what could lead to serious injury or death if the Lossnay remote controller is misused.
⚠ CAUTION	This symbol denotes what could lead to personal injury or property damage if the Lossnay remote controller is misused.

● After reading this installation manual, keep it in a safe place where the user can refer to it whenever necessary.
  Make sure that this manual is forwarded to the next user.

⚠ WARNING

Ask your dealer or technical representative to install the unit. Any deficiency caused by your own installation may result in an electric shock or fire.	**Ensure that installation work is done correctly following this installation manual.** Any deficiency caused by installation may result in an electric shock or fire.
Install in a place which is strong enough to withstand the weight of the PZ-52SF-E. Any lack of strength may cause the PZ-52SF-E to fall down, resulting in personal injury.	**All electrical work must be performed by a licensed technician, according to local regulations and the instructions given in this manual.** Any lack of electric circuit or any deficiency caused by installation may result in an electric shock or fire.
Firmly connect the wiring using the specified cables. Carefully check that the cables do not exert any force on the terminals. Improper wiring connections may produce heat and possibly a fire.	**Do not move and re-install the PZ-52SF-E yourself.** Any deficiency caused by installation may result in an electric shock or fire. Ask your distributor or special vendor for moving and installation.
Never modify or repair the PZ-52SF-E by yourself. Any deficiency caused by your modification or repair may result in an electric shock or fire. Consult with your dealer about repairs.	

⚠ CAUTION

Do not install in any place exposed to flammable gas leakage. Flammable gases accumulated around the body of PZ-52SF-E may cause an explosion.	**Do not install in any steamy place such as a bathroom or kitchen.** Avoid any place where moisture is condensed into dew. Doing so may cause an electric shock or a malfunction.
Do not use in any special environment. Using in any place exposed to oil (including machine oil), steam and sulfuric gas may deteriorate the performance significantly or give damage to the component parts.	**Do not install in any place where acidic or alkaline solution or special spray are often used.** Doing so may cause an electric shock or malfunction.
Wire so that it does not receive any tension. Tension may cause wire breakage, heating or fire.	**Use standard wires in compliance with the current capacity.** A failure to this may result in an electric leakage, heating or fire.
Completely seal the wire lead-in port with putty etc. Any dew, moisture, cockroaches, insects entering the unit may cause an electric shock or a malfunction.	**Do not touch any PCB (Printed Circuit Board) with your hands or with tools. Do not allow dust to collect on the PCB.** Doing so may cause fire or an electric shock.
Do not wash with water. Doing so may cause an electric shock or a malfunction.	**Do not touch any control button with your wet hands.** Doing so may cause an electric shock or a malfunction.
Do not install in any place at a temperature of more than 40°C or less than 0°C or exposed to direct sunlight.	**Do not press any control button using a sharp object.** Doing so may cause an electric shock or a malfunction.
	Never contact the power supply with the control wiring terminals. Doing so will certainly cause the controller to catch fire.

2 Specification

Source power requirement	Input voltage	17VDC - 30VDC, 0.02 A
		Power received from an outdoor unit or a power supply unit via M-NET transmission line.
Interface condition for transmission line	M-NET transmission line ; 30VDC+AMI signal (±5VDC)	
Number of M-NET controlled Lossnay unit controlled by PZ-52SF-E	1 - 16	
Environmental condition	Temperature	Operating	0 - 40°C
		Non operating	0 - 70°C
	Humidity	30 - 90%RH (No condensation)	
Dimensions	120 (High) × 70 (Width) × 8.41 (Depth) mm	
Weight	0.12 kg	

3 Checking the Supplied Parts

Check that the box includes the following parts in addition to this installation manual:

Lossnay Remote Controller Model Name	Enclosed Parts
PZ-52SF-E	(1) Lossnay remote controller 1
	(2) Cross-recessed pan-head screws 2
	(3) Operation manual 1

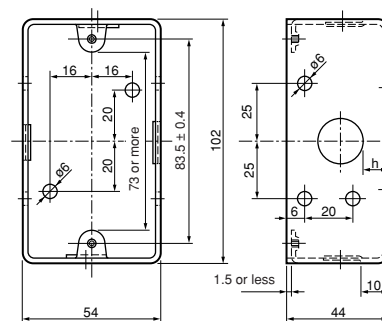NOTE: The parts listed below must be purchased separately.

(1)   Cable connecting the Lossnay remote controller to the Lossnay unit: Use the cable specified below.

Cable type	CVV (2-core): 0.75 - 1.25 mm² or equivalent

* CVV is a control cable which is sheathed in polyvinyl chloride with polyvinyl insulated wires inside.

NOTE: If you need to use a cable extension longer than 10 meters, select an electric wire that meets the following specifications:
Wire specification ..... CPEVS: ø1.2 mm - ø1.6 mm or equivalent
CVVS: 1.25 mm² - 2 mm² or equivalent
*CPEVS: PE insulated PVC jacketed shielded communication cable
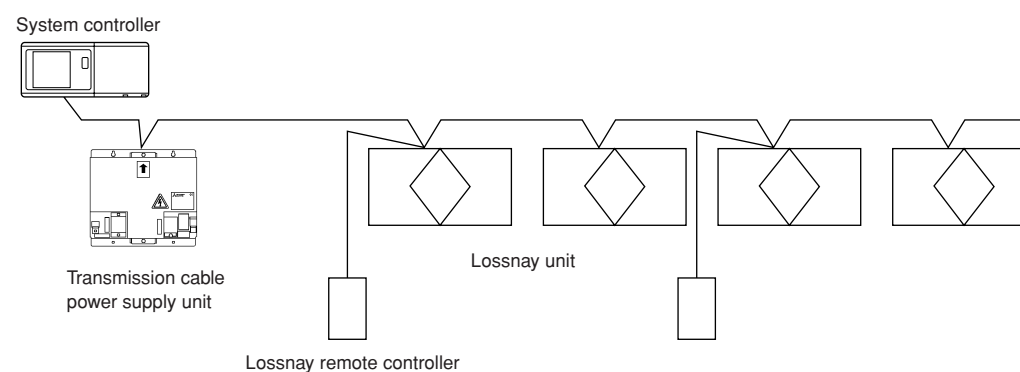*CVVS : PVC insulated PVC jacketed shielded control cable

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(2)   The switch box is necessary for mounting. Use the switch box specified in the right.

4 Restriction when the Lossnay units are connected with the central controller transmission cable

When the Lossnay units and the Lossnay remote controllers are connected with the central controller transmission cable, the number of the Lossnay remote controllers is restricted because of the capacity of the power supply unit.
The following table shows how many Lossnay remote controllers can be used.
The number of the Lossnay units that isn't supplied power from the cable doesn't concern about it.

For details on electrical connections, please refer to the power supply unit catalogue.
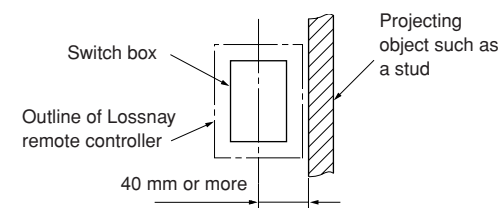

System controller

Transmission cable power supply unit

Lossnay unit

Lossnay remote controller

5 Installing the Lossnay Remote Controller

1. Mount the switch box.

(1)   Install the switch box (purchased separately) as explained below.

Switch box

Outline of Lossnay remote controller

40 mm or more

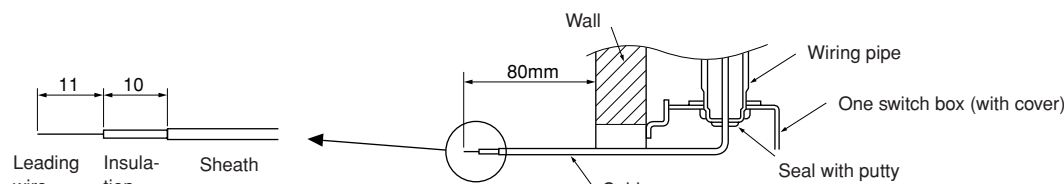Projecting object such as a stud

NOTE: • Be sure to install the switch box with the clearance shown in the illustration at the left. (Check the space between the unit and any projection such as a stud.)
• Leave a space of 120 mm or more below the Lossnay remote controller so that the screwdriver can be used.
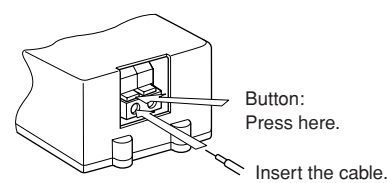
(2)   Purchase the thin-copper wiring pipe and locknuts and bushings separately.

2. Install the Lossnay remote controller.

(1)   Pull out about 80 mm of cable from the wall and remove the insulation from its end.
(2)   Use putty to seal the cable lead-in hole in order to prevent insects from damaging the wiring and to prevent air from condensing on the Lossnay remote controller circuit board. If the hole is not sealed well, the Lossnay remote controller circuit board may be damaged.
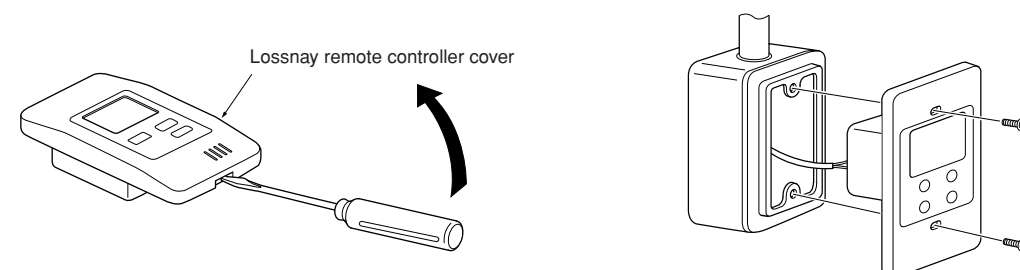

Leading wire   Insulation   Sheath

Wall
Wiring pipe
One switch box (with cover)
Seal with putty
Cable

(3)   Connect the cable to the terminal board in the bottom rear of the Lossnay remote controller unit.

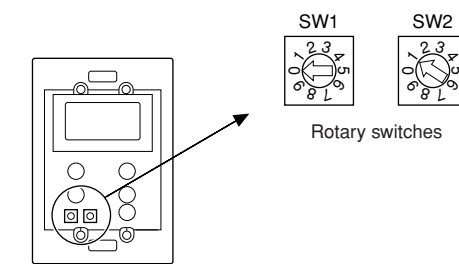Button: Press here.

Insert the cable.

• The cable does not have polarity.
• When connecting stranded cable, hold down the button on the terminal board while inserting the cable.
• The cable connects to the main terminal board when it is inserted into the bottom terminal.
• When disconnecting the cable, hold down the button while pulling out the cable.
• After inserting the cable, slightly tug on it to check that it does not easily disconnect. If the cable is not securely connected, a short-circuit or malfunction may occur.

(4)   Remove the Lossnay remote controller cover using a standard screwdriver, then attach the Lossnay remote controller unit to the switch box using the two enclosed cross-recessed pan-head screws. Use a standard screwdriver with a blade that is 4 mm or wider to remove the cover.

Lossnay remote controller cover

⚠ CAUTION: • Forcing off the cover using a screwdriver that is less than 4 mm wide may result in damage to the equipment or injuries.
• Attach the Lossnay remote controller to a level surface. Do not overtighten the screws, otherwise the case may become deformed or break.

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(5)   Set the Lossnay remote controller address.

SW1   SW2

Rotary switches

Set the Lossnay remote controller address using the rotary switches SW1 and SW2 on the front of the Lossnay remote controller.

■ Setting range: 101 to 200
Rotary switch SW1 indicates the tens digit and SW2 indicates the ones digit. In addition, 100 is automatically added to the setting as shown below.

Rotary switch setting	01 - 99	00
Lossnay remote controller address	101 - 199	200

The address is set to 01 when the Lossnay remote controller is shipped from the manufacturer.

⚠ CAUTION: The address must be set if the Lossnay remote controller is used as a part of a multiunit system. Set the address according to its position in the system. In addition, refer to the Lossnay Adaptor Installation Manual for more information concerning the setting of the addresses.

(6)   After setting the Lossnay remote controller address, attach the Lossnay remote controller cover.
When attaching the Lossnay remote controller cover, set the top of the cover onto the two top hooks, then push in on the bottom of the cover until it snaps into place.
If the bottom of the cover is attached first, the top of the cover cannot be attached. Forcefully pushing in the top of the cover to attach it may break the hooks.

6 Registering the Lossnay Unit With the Lossnay Remote Controller
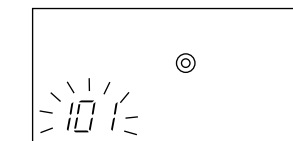### (Initial registration mode operation)

A Lossnay unit must be registered with the Lossnay remote controller in a group arrangement. Register a Lossnay unit using the initial registration mode as shown below. In addition, the initial registration mode can be used to search for a Lossnay unit registered to the group or to delete a registration.

Setting Procedure
① Turn off the unit.
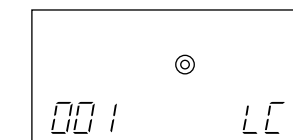   (Perform the following operation after "H0" flashes on the display.)

② Hold down both [⊠] and [FILTER] for more than 2 seconds.
   This starts the initial registration mode and the set Lossnay remote controller address flashes on the display.

③ Press [⊠] to select the address of the Lossnay unit that you wish to register with this Lossnay remote controller.
   After the button is pressed once, the Lossnay remote controller address, and then the Lossnay unit address is displayed. Afterwards, each press of the button increases the Lossnay unit address by 1 as shown below. Holding down the button changes the address more quickly.

[101] → [- - -] → [001] → [002] → · · · · → [098] → [099]
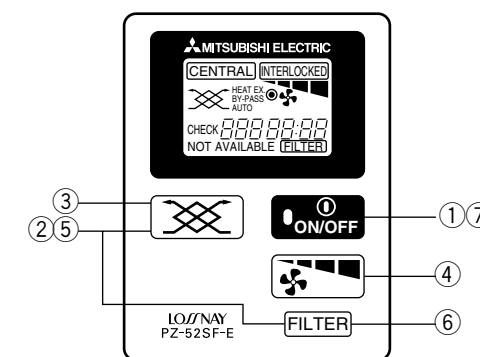(Set Lossnay remote controller address)

Flashes

④ When the address of the Lossnay unit that you wish to register is displayed, press [↵] to begin registering.
   If the registration is completed correctly, the display appears as shown below.

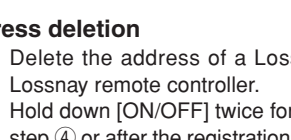The Lossnay unit type, "LC", is displayed.

If the registration is not completed correctly, "88" flashes in the display. Check that the selected Lossnay unit address or the wiring are correct.
Up to 16 Lossnay units can be registered.

⑤ After registering, hold down both [⊠] and [FILTER] for more than 2 seconds to end the initial registration mode and the normal display appears.
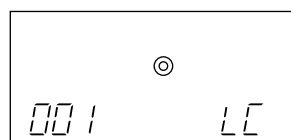
Confirmation of registered address
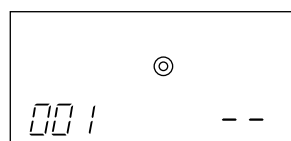⑥ Display the addresses of the Lossnay units that are registered with this Lossnay remote controller.
   Each press of [FILTER] in step ② or ④ displays the address of a registered Lossnay unit and its type, "LC".
   If no Lossnay unit is registered, "– – –" appears in the address display and no type is displayed.

Address deletion
⑦ Delete the address of a Lossnay unit registered with this Lossnay remote controller.
   Hold down [ON/OFF] twice for 2 seconds each time either in step ④ or after the registration is complete to delete the registration of the Lossnay unit that is currently displayed.

When the display appears as shown above, hold down [ON/OFF] twice for 2 seconds each time.

↓

If the registration is deleted correctly, "– –" appears in the display.
If the registration is not deleted correctly, "88" flashes in the display. Check that the selected Lossnay unit address and the wiring are correct.

NOTE: • Up to 16 Lossnay units can be registered.
• If the registration cannot be completed or deleted correctly, either the set address or the wiring of the Lossnay unit whose registration you wish to add or delete may be incorrect. Check the wiring and the address that is set.

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